

USING THE THEORY OF REASONED ACTION
TO PREDICT CONDOMLESS SEX
AMONG EMERGING ADULT WOMEN IN A
UNIVERSITY SETTING

By

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Abstract: The purpose of this study was to use the Theory of Reasoned Action as grounded methodology to explore the influences of condomless sex in emerging adult women (18-24-years old). Overall, 478 participants who attend a public land-grant institution in Oklahoma fully completed the study and 286 met the inclusion criteria. Main topics addressed within the study were attitudes towards condom use, condom self-efficacy, self-esteem, sexual double-standards, and substance use. The results of this study indicated self-efficacy and attitudes towards condom use were of statistical significance in predicting condom use intention. Participants overall had a high level of personal condom self-efficacy but lower overall attitudes towards condoms in general. Implications of this study, as well as directions for future research, are discussed.

TABLE OF CONTENTS

CHAPTER	
1. INTRODUCTION	1
Statement of the Problem.....	3
Purpose of the Study	4
Hypotheses.....	4
Significance.....	4
Operational Definitions.....	5
Delimitations.....	6
2. LITERATURE REVIEW	7
Severity of Condomless Sex Among College-Aged Women and Unintended Pregnancy in the United States and Oklahoma.....	9
Severity of Condomless Sex Among College-Aged Women and STI and HIV/AIDs in the US and Oklahoma	10
Perceptions & Attitudes towards Condom Usage in College-Aged Women	12
Subjective Norms & Condom Use Intention in a College/University Setting	14
Self-Esteem and Emotional Attachment as a Factor.....	16
Alcohol and Substance Use a Factor	17
Campus Norms and Hookup Culture as an Indicator	20
Theory of Reasoned Action	22
Conclusion	23
3. METHODS	25
Study Design.....	25
Participants and Recruitment	25
Procedures.....	26
Measures	27
Data Analysis	29
4. RESULTS	31
Descriptive Statistics of the Sample	31

Statistical Significance.....	36
Substance Use	38
5. DISCUSSION.....	41
Theory of Reasoned Action and Condom Use Intention.....	42
Limitations	44
Study Implications	47
Conclusions.....	49
APPENDICES	50
VITA	83
REFERENCES	84

LIST OF TABLES

Table	Page
1. Demographic and Other Characteristics of Study Participants.....	34
1A. Demographic and Other Characteristics of Study Participants	35
2. Regression of predictor values in conjunction with condom use intention.....	37
3. Substance and Alcohol Use of Study Participants.....	40

LIST OF FIGURES

Figure	Page
1. Theory of Reasoned Action and Condom Use Intention	22
1. Theory of Reasoned Action and condom use intention with emerging adult women at a land grant university	46

CHAPTER I

INTRODUCTION

Condomless sex in emerging adult women is a unique and prevalent public health risk. An estimated 14% of sexually active female college students did not use a condom in the last 30 days; additionally, an additional 14% stated they never use a condom during vaginal intercourse (American College Health Association, 2016). Further, this same report indicated 7.7% of sexually active college undergraduates did not use any method of birth control to prevent pregnancy, and an estimated 2% of sexually active females had an unintentional pregnancy (n= 27,787) (American College Health Association, 2016).

Engaging in repeated occurrences of condomless sex, especially when these occurrences involve non-monogamous partners or multiple unprotected partners, can increase risk of cervical cancer, HPV and STI infections, HIV/AIDs, unplanned pregnancies, and low self-esteem due to desire high desires for monogamous relationships. The increase of infections and negative side effects from condomless sex is much higher in women than in men, despite more overall protective factors such as religious attendance, desire for monogamy, and more being academically focused, (Fielder, Walsh, Carey, & Carey, 2013; Green, Fulop, & Kocsis, 2000).

Emerging adult women can have many behavioral and attitudinal determinants which can increase willingness to engage in condomless sex: alcohol and substance use, low self-esteem, negative attitudes towards condoms, desire for emotional attachment, hookup culture and traditional gender roles. This complex interwoven behavioral and emotional web helps to explain why, despite more access to birth control and reproductive services, women still continue to engage in risky sexual behavior. Research suggests that behavior and attitudes towards condom use and condom use intention is a primary indicator whether or not an individual will engage in condomless sex (Carter, McNair, Corbin, & Williams, 1999). College women are seemingly more affected by condomless sex versus their male counterparts due to emotional distress and depression experienced after the sexual encounter (Fielder et al., 2013) leaving the desire for companionship and monogamy.

There are many health behavior theories that have examined the overall thought process of condom use – health belief model (Lollis, Johnson, & Antoni, 1997) which examines the attitudes and perceived benefits/barriers to condom use, the trans-theoretical model (Bryan, Aiken, & West, 1996) which examines the thought process of deciding to engage in sex with condoms, but the Theory of Reasoned Action is one of the only theories which examines intention. Therefore, using the Theory of Reasoned Action will help to determine the attitudes and intentions of condom use in emerging adult women.

A review of the literature suggests there is a void in research that focuses on the correlates of why women engage in condomless sex. Currently, the research focuses on single elements to help explain this behavior such as alcohol and substance use (Caldeira

et al., 2009; Dvorak et al., 2016; Lindgren, Pantalone, Lewis, & George, 2009; Roberts & Kennedy, 2006), self-esteem (Ethier et al., 2006; Gullette & Lyons, 2006), and hookup culture (Fielder et al., 2013; Stinson, 2010). Although there are many areas within the research examining the separate components, there is a need to examine more than one reasoning with a theoretical underpinning to help understand the potential influences on why emerging adult women are engaging in condomless sex.

Statement of the Problem

In the United States condom use has a very scripted gender role – men are responsible for providing the condom. However, unless a female partner attempts to first suggest or negotiate condom use, condom use does not always occur; this further enhances sexual compliance among heterosexual partners regarding traditional gender roles (Carter et al., 1999; Ferh, Vidourek, & King, 2014; Grello, Welsh, & Harper, 2006). Traditional gender roles center around the primary responsibility of the male partner to supply the condom, plus the freedom to have as many sexual partners they desire (with or without emotional commitment). Birth control, actual condom negotiation, and “sex with commitment” falls into the responsibility of women. These roles help influence negative sexual double-standards among peers – which results in embarrassment to negotiate and buy condoms due to the social stigma. Research also shows that emerging adult women who engage in condomless sex are more likely to engage in alcohol and other drug use (Kanekar & Sharma, 2007; LaBrie, Hummer, Ghaidarov, Lac, & Kenney, 2014), lower levels of self-esteem (Gullette & Lyons, 2006) and self-worth, and lower overall condom self-efficacy (Muñoz-Silva, Sánchez-García, Nunes, & Martins, 2007). Overall, emerging

adult women have a lower perception of risk when engaging in condomless sex; therefore, they do not perceive any possible consequences (i.e. STI or unplanned pregnancy) could happen to them.

Focusing research and public health programming on emerging adult women who engage in condomless sex can help reduce the high levels of unplanned pregnancy throughout the United States and Oklahoma, as well as help reduce STI and HIV/AIDs rates, in addition to helping increase levels of overall self-worth and self-esteem.

Purpose of the Study

The purpose of this thesis study is to use the Theory of Reasoned Action to understand and explore the various behavioral intentions, subjective norms, and internal attitudes influencing emerging adult women's likelihood of engaging in condomless sex at their next sexual encounter.

Hypothesis

When controlling for age, relationship status and contraceptive use, examining attitudes towards condom usage, self-esteem, self-efficacy, and sexual double standards will predict condom-use intention at emerging adult women's next sexual encounter.

Significance

Condomless sex continues to impact communities across Oklahoma. Overall, there has been a steady increase in the number of Chlamydia cases in Oklahoma from 2011-2015, an increase of 6,429 cases overall (14,596 vs. 21,025), (Oklahoma

Department of Health, 2015). There is also an increase in number of statewide cases for Gonorrhea from 4,216 cases to 6,542 total cases (an increase of 2,326 - 22.3%), (Oklahoma Department of Health, 2015). Additionally, higher rates of Gonorrhea and Chlamydia cases can be found within counties with higher rates of emerging adult populations due to college campus locations such as: Payne County, Oklahoma County, and Cleveland County. Statewide, 20-24 years of age consistently had the highest rates of STI's, and females had more reported cases than males (Oklahoma Department of Health, 2015). Additionally, there are higher levels of unplanned pregnancy in Oklahoma (49 per 100 women) versus the United States average (32 per 100), (Sonfield & Kost, 2015).

It is imperative to acknowledge the need and importance of behavioral interventions for emerging adult women in all levels of sexual health creating overall holistic wellness for women in Oklahoma. Keeping in mind the complexity of why emerging adult women are engaging in condomless sex can help influence and create successful programming within the state. Results from this study could help provide rationale for prevention specialists, public health programming and researchers to help understand the predictors of condomless sex in emerging adult women, when developing and/or creating interventions.

Operational Definitions

Emerging Adult Women

Previous studies have defined emerging adult women as ranging from 18-24, (Arnett, 2000; Ethier et al., 2006; Fielder et al., 2013). For the purpose of this study, Emerging Adult Women, has been defined as women who are between the ages of 18-24.

Delimitations

Delimitations for this study include geographic location, recruitment location, exclusion of participants from other demographics, and previous sexual activity. This study will include only participants recruited from online research platforms and other recruitment means within a university setting. The results of this study may not generalize well to other locations and/or other populations.

CHAPTER II

LITERATURE REVIEW

As many as 20 million new cases of STI's are diagnosed each year within the United States, and over half of this number comes from people aged 15-24 (CDC, 2015). Higher rates of STI contraction is attributed to ineffective condom usage and condomless sex across the young adult/adolescent population (Kanekar & Sharma, 2007; Reece et al., 2010). Risky sexual behavior is a common phenomenon among emerging adults across the country, and casual hookups have become a normative factor on college campuses across the United States (Fielder et al., 2013; LaBrie et al., 2014; Monto & Carey, 2014)

The sexual practices that are experienced by college students include multiple unprotected and unknown status partnerships, condomless sex (both oral and anal sex), contraception failure, and the influence alcohol and/or substance use has on condom utilization (Lollis et al., 1997). Engaging in condomless sex can put college students at a greater risk for unintended pregnancies and contraction of an STI. As many as 46% of college students are engaging in condomless sex and had no intention of using a condom prior to the sexual encounter (Gullette & Lyons, 2006).

Both college-aged men and women (aged 18-24 years) experience risky sexual encounters and neither sex is more apt to engage in condomless sex; however, the risk factors and perceived risks/benefits of condom usage vary across the sexes. Overall, men are higher risk takers in almost every aspect of their life (i.e. reckless driving and substance abuse); however, women are considered to be higher risk takers in terms of having multiple unprotected sexual partners across the lifetime and engaging in condomless sex (Gullette & Lyons, 2006).

College women are seemingly more affected by condomless sex versus their male counterparts. This is due to emotional distress and depression experienced after the sexual encounter (Fielder et al., 2013). According to Fielder and colleagues (2013), college women tend to have a higher rate of protective factors that can initially protect them from engaging in condomless sex such as: strong religious beliefs, desires to stay in a monogamous relationship, religious service attendance, and academic achievements. However, the data collected from most studies contradict more protective factors will result in consistent condom usage (Fielder et al., 2013; Green et al., 2000). Through review of the previous literature on psychological and social determinants of why women are engaging in condomless sex, there is an evident need to understand the possible connections between behavior and attitudes in addition to subjective norms that increase the risk of college-aged women engaging in condomless sex in order to better understand condom use intention.

Severity of Condomless Sex Among College-Aged Women and Unintended
Pregnancy in the United States and in Oklahoma

Through the advancement of medicine and reproductive health, women have more options to a variety of contraception methods, but rates of unintended/unplanned pregnancy continue to remain high and fails to meet national goals costing the United States an average of \$5.0 billion per year (Ersek, Brunner Huber, Thompson, & Warren-Findlow, 2011). Further, the emerging adult women population (18-24) consecutively holds the highest rates in the country for unplanned pregnancy and are considered particularly vulnerable in engaging in condomless sex. It is important to note the vulnerability of this population is due to both higher levels of sexual activity and emerging adult women being within childbearing years. Roughly 1,1000 teen girls give birth every day and teen births (15-19) 9x higher than other developed countries, (Centers for Disease Control, 2011). In Oklahoma, 9.7% of unplanned pregnancies did not want the pregnancy but carried it to full term (Centers for Disease Control, 2016). Overall, there is an unintended pregnancy rate in Oklahoma was 49 per 1000 women aged 15-44 in 2015, which is higher than the national average of 32 per 1000 women for the same year (Sonfield & Kost, 2015).

There is financial benefit for both the state of Oklahoma and the federal government to create behavioral interventions on the state level to reduce unplanned pregnancies. In 2010, Oklahoma had 53,200 births; 24,300 of these births were unplanned and 80.7% were publicly funded (Sonfield & Kost, 2015). Each year, one unplanned pregnancy costs the state \$16, 681. Just within the state of Oklahoma, a behavioral interventions towards unplanned pregnancy could save the state of Oklahoma

\$56.7 million per year (Sonfield & Kost, 2015). Pregnancy can be prevented with proper and consistent condom use; however, overall 57.1% of emerging adults in Oklahoma did not use a condom during their last sexual encounter, (Centers for Disease Control, 2011).

Severity of Condomless Sex Among College-Aged Women and STI and HIV/AIDs in the US and in Oklahoma

Estimates indicate that the adolescent and emerging population (15-24) account for just one quarter of the sexually active population in the United States; however, they also account for at least half of the 20 million new STI that also occur every year, (Centers for Disease Control, 2013). Nationally, women aged 20-24 held both the highest rates of most common bacterial STI's: Chlamydia and Gonorrhea. These rates were higher than other age groups and their male counterparts. For Chlamydia, the rate among emerging adult women was 3,651.1 cases per 100,000 compared emergent adult males with a rate of 1,368.3 cases per 100,000 (Centers for Disease Control, 2013). Although Gonorrhea rates were not as prominent as Chlamydia, differences between genders is notable, with 533.7 cases of Gonorrhea per 100,000 emergent adult females and 485.6 cases per 100,000 emergent adult males.

In Oklahoma, overall, the rates of both Chlamydia and Gonorrhea were higher than the national average for all young people aged 15-24. Chlamydia is the highest diagnosed STI for emerging adults within the state of Oklahoma at 2887.4 total cases per 100,000 versus the national average of 2160.2 cases per 100,000 (Oklahoma State Department of Health, 2015). Chlamydia is diagnosed 2.4 times more within the emergent female population with 754.9 cases per 100,000 compared to the emergent adult males at 316.0 cases per 100,000 state-wide.

The second most commonly diagnosed bacterial STI in the state of Oklahoma for the year of 2015 was Gonorrhea. Overall, there were 559.7 cases per 100,000 for young Oklahomans aged 15-24. This was significantly higher than the national average for Gonorrhea (421.3 cases per 100,000) (Centers for Disease Control, 2013). Overall, out of the 6,542 cases diagnosed, 2,301 cases were attributed to individuals between the ages of 20 to 24 – the highest of any other age group (Oklahoma State Department of Health, 2015).

The risk for HIV has become more significant in the emerging adult population in the United states, an estimated 9,731 new cases of HIV were diagnosed in 2014 in the United States for youth aged 13-24; however, 81% (7,868 cases) of these diagnoses occurred in the emerging adult population aged 20 to 24. By the end of 2012, an estimated 57,200 aged 18 to 24 were living with HIV in the U.S. of these 25,300 were living with undiagnosed HIV—this remains the highest rate of undiagnosed HIV of any other age group (Centers for Disease Control, 2013). The high rates of emerging adults living with HIV also correlates with the population of 20-24 also holding the highest rates of other STI's, and it is common knowledge that the presence of another STI greatly increases a person's likelihood to being diagnosed, contracting, or unintentionally transmitting HIV to another partner.

In Oklahoma, there were 317 new cases of HIV diagnosed in 2015 (Oklahoma State Department of Health, 2015). Out of the 317 newly diagnosed cases the population of 20-29 year old's held the highest percentage compared to other age groups at 41.0% (130 cases) (Oklahoma Department of Health, 2015). In terms of risk by sex, men were newly diagnosed at a rate of 86.1% in comparison to 13.9% for women. The primary

mode of transmission within the state of Oklahoma is men who have sex with men (MSM) at 58.0%, while the other 42% were composed of heterosexual transmission (16.7%) and injection drug use (15.1%).

Perceptions and Attitudes towards Condom Usage in College-Aged Women

Being able to address and understand the perceptions college students hold while engaging in condomless sex has been successful in understanding the underlining risk factors for college students (Lollis et al., 1997). Perception of risk is a key determinant that may help influence women's willingness to use a condom during sexual acts. If a woman does not perceive that her current partner has a perceived risk of having an STI, research suggests she will be less likely to suggest condom usage (Green, Fulop, & Kocsis, 2000).

Understanding an individual's self-efficacy, which is their belief or confidence within themselves to successfully complete a task, is needed to fully understand and examine condom use intention. Internally, there is a subconscious weighing of cost-benefits for enacting any health behavior, and research has demonstrated individuals must perceive that they have the confidence to engage in the behavior (Parsons, Halkitis, Bimbi, & Borkowski, 2000) to actually engage in the behavior. Understanding condom self-efficacy, the belief and confidence in one's ability to practice safer sex, is arguably the most important component when attempting to fully understand the consistency and intention of consistent condom use (Roberts & Kennedy, 2006).

The higher an individual's condom self-efficacy is, the lower their willingness to participate in risky sexual behavior such as inconsistent condom use or multiple unprotected partners (Parsons et al., 2000). When evaluating condom self-efficacy, it is

important to understand if women do not feel they have the ability to influence their partner's decision to use a condom—or feel that they hold minimal amount of control in the sexual situation, they are going to be less likely to try and engage in the protective behavior (Parsons et al., 2000).

Understanding the attitudes towards a particular behavior, defined within this study as condom usage, is a better predictor of the behavior than the attitude towards the actual object (Glanz, Rimer, & Viswanath, 2015). Understanding the underlying attitudes towards condom usage in college-aged women is critical in order to successfully understand why women are at increased risk for unwanted pregnancies and STIs.

Women who hold a negative attitude towards condom usage are considered more “at-risk” and more prone to engage in risky sexual behavior versus someone that holds a less negative attitude to using the male condom (Sterk, Klein, & Elifson, 2004). Studies have demonstrated that the main attitudes towards using a condom remain the same: embarrassment, uncomfortableness in engaging in discussion to use a condom with a new or temporary partner, lack of stimulation, and preference of sensation without condoms (Sterk, 2005). Overall, the higher women negatively perceive condom use, regardless of the reasoning, the higher their risk to engage in risky sexual behavior.

Embarrassment of buying condoms and partners unwillingness to engage in safe sex practices are the two primary attitudes that prevent college-aged emerging adults from engaging in consistent condom use (Tung, Farmer, Ding, Tung, & Hsu, 2009). This particular barrier is extremely important in understanding the nature of condomless sex because it overlays into condom self-efficacy and gives insight into women's control over the sexual experience.

Subjective Norms and Condom Use Intention in College/University Setting

Subjective norms is perceived social pressure and dictation to perform a social behavior (Finlay, Trafimow, & Moroi, 1999; Park, 2000). Subjective norms have been identified as having two defining realms: the first is represented by motivation to comply (internally) and second is normative beliefs from other people and society (externally) (Albarracín, Johnson, Fishbein, & Muellerleile, 2001). Subjective norms surrounding condom use intention in emerging adult women are traditional gender role, sexual scripts, and peer perception.

Gender roles and sexual scripts play an important role in attitudinal development in the negotiation between a female and her partner. Gender roles fuel the sexual double standards presented when women want to negotiate condom usage (Carter et al., 1999; Ferh et al., 2014). Traditional gender roles fosters sexual compliance, meaning that women tend to believe they must respond to males' sexual desire and initiation (Grello et al., 2006; Impett & Peplau, 2003). Additionally, women are more likely to comply to unwanted sexual encounters due to an innate feeling of being responsible for males' sexual desires (Impett & Peplau, 2003). Further, there are well known social dimensions of masculine sexuality – some men perceive prolonged sexual intercourse without a condom as a prowess in masculinity creating a mutual trust between him and a partner, and preserving the 'manly skill' of condom use avoidance (Sarkar, 2008).

Traditionally condoms are provided by the male counterpart; however, studies show that the male partner will not negotiate condom use unless the female first suggests it (Carter et al., 1999). However, condom negotiation being initiated by the female partner has caused further repercussions due to sexual double standards. According to a

study performed by Fehr and colleagues (2014), sexual double standards arise when a woman is scored less favorable in likeability for wanting to engage in condom use by men, while men are scored more favorable in likeability for wanting to engage in condom use. Also, there is a solid argument within research that the presence of sexual double standards puts emerging adult males and females on different levels of both privilege and power (Bogle, 2008; Stinson, 2010). If a woman wants to engage in safer-sex practices by using a condom, the sexual double standard indicates the woman is considered “high risk” and the sexual encounter should not occur (Carter et al., 1999; Ferh et al., 2014). Further, there is a very fine line in which women are allowed to openly express their sexuality. This translates to women being caught in limbo between being expected to hookup and meet the desires of men and fulfilling this responsibility, while also holding onto their “dignity and worth” (Stinson, 2010).

Subjective norms can dictate sexual behavior. Specifically, research has found women are more inclined to be judged more harshly by their female peers for carrying condoms and being open about using condoms within their sexual activities (Ferh et al., 2014). For women to not be seen as a sexual risk by their partner, the unspoken sexual double standards have created an atmosphere that will prevent them from engaging in condom negotiation, and more susceptible to engaging in condomless sex. This is compared to men’s cavalier approach in which their reputation is not threatened and have been given more leeway in engaging in casual sexual occurrences within our society.

Self-Esteem and Emotional Attachment as a Factor for Engaging in Condomless

Sex

The literature suggests a strong correlation between levels of self-esteem and condom usage in emerging adult women. Identifying a woman's level of self-esteem is an important correlate in understanding other levels of possible psychological factors such as depression, anxiety, and stress levels (Ethier et al., 2006). Studies have found that women with poorer self-esteem are more likely to engage in condomless sex, have multiple unprotected and unknown status sex partners, and more likely to initiate sexual intercourse (Ethier et al., 2006; Green et al., 2000). Overall, women with lower self-esteem often look for corresponding "fillers" within their lives to attempt to increase their self-worth, this phenomena leads to increased alcohol use, tendency for binge drinking, reckless behavior and greater involvement with "at-risk" health behaviors (i.e. condomless sex) (Gullette & Lyons, 2006; Soet, Dilorio, & Dudley, 1998; Sterk, Klein, & Elifson, 2005).

If women are seeking romantic relationships, they will be less likely to suggest the idea of using a condom barrier (even if they want too) because they feel less attractive and less like a potential mate to their partner (Ethier et al., 2006). This attempt to seek romantic relationships creates an emotional attachment to their sexual partner, which helps to explain their willingness to engage in condomless sex. For women, emotional investment is a priority when engaging in sex; therefore, sexual intercourse commands intimacy and emotional commitment, which helps to explain women's willingness to engage in casual sex (Grello et al., 2006). Choosing to not negotiate condom usage, women are signaling an unspoken trust for their partner and do not perceive them to be

“at-risk”; therefore, creating a bond between the two of them after sex (Ethier et al., 2006; Green et al., 2000; Gullette & Lyons, 2006).

Alcohol and Substance Use as a Factor for Condomless Sex in College-Aged Women

The hookup culture on college campuses have been linked situationally to both alcohol and drug misuse and abuse (alcohol use among emergent adults is notably higher than other populations). In 2015, 58.3 percent (20.4 million) of emerging adults were current alcohol users within the United States (Substance Abuse and Mental Health Services Administration, 2015). Out of the estimated 66.7 million people aged 12 and older that were reported as binge alcohol users, an estimated 13.6 million (39 percent) of these users fell within the emerging adult population (SAMHSA, 2015). This translates to approximately 2 out of 5 emerging adults engage in binge drinking. Binge drinking is defined for males as five or more drinks within the same sitting, and for females drinking four or more drinks within the same social sitting (SAMHSA, 2015). Daily marijuana use is at the highest level since 1980 for the emerging adult population, (2.8% in 1980 of 18-24-year-olds engaging in marijuana use to 7.8% in 2016), (National Institute on Drug Abuse, 2016).

Alcohol consumption is known as a “social lubricant” because the substances ability to inhibit the prefrontal cortex of the brain. The prefrontal cortex (PFC) is known as the decision-making area of the brain, which receives external stimuli and tells the body how to properly respond to the environment (Abernathy, 2010). Further, the PFC is not fully developed until an individual reaches their mid-twenties. College student’s

brains are not developed until the mid to late twenties; resulting in college students being allowed to make adult decisions without fully developed and mature brains. Previous research shows increased drinking and substance use during vital development of the brain can cause a disruption in the myelination process, and without it, the brain is not able to complete the complex functioning that is needed to work properly.

Underdevelopment in the PFC is important when understanding emerging adult's decision-making in sexual intercourse. Alcohol and substance use inhibits the ability to choose safe sexual partners, practice safe-sex methods, and the increased vulnerability to sexual assault (Abernathy, Chandler, & Woodward, 2010).

Evidence suggests that among college students, alcohol consumption and substance use/abuse in combination with sexual behaviors are deeply intertwined and complex, playing primary roles for engaging in any type of sexual behavior (Bersamin, Paschall, Saltz, & Zamboanga, 2012; Lindgren et al., 2009). Marijuana users, as well as other substance users, are more likely to engage in more risky sexual behavior such as more unprotected sexual partners, reduced condom usage, willingness to engage in sexual activity while under the influence of marijuana and higher rates of sexual favors exchange for drugs (Andrade, Carroll, & Petry, 2013; Currin, Croff, & Hubach, 2017; Gelder, Reefhuis, Herron, Williams, & Roeleveld, 2011).

Further, women are more likely to feel more confident engaging in sexual behavior under the influence of alcohol and substance use but are more prone to ineffectively using a barrier method during sex due to intoxication (Ingersoll, 2008). Additionally, a study conducted by Currin and colleagues examining sex-related alcohol expectancies determined age as a significant predictor of condom use intention with

women (2017). Meaning condom use intention, under the influence of alcohol, increases and a woman gets older (Currin, Croff, Hubach, et al., 2017). This supports the need to address condom use intention in conjunction with alcohol and substance use in emerging adult women. Independent of alcohol use, substance abuse and illicit drug use, is associated with having more unprotected partners and more consistent inability to negotiate condom use (Currin, Croff, & Hubach, 2017; Richter, Valois, McKeown, & Vincent, 1993).

Overall, the consumption of alcohol is one of the major predictors for engaging in previously unplanned sexual behavior. According to recent national data, half of sexually active college students did not use a condom during their most recent sexual event, and 15.9% of all students had condomless sex as a result of drinking too much alcohol (American College Health Association, 2015). According to a study by Dvorak and colleagues, college students were asked about their most previous engagement in sexual activity, 65% of respondents indicated they would not have engaged in sex had they not been drinking alcohol (Dvorak, Kilwein, Wray, Stevenson & Sargent, 2016). Several studies have also found that college students not only tend to perceive alcohol as the facilitator for sexual interaction, but often attribute the influence of alcohol as their primary reasoning for engaging in sexual hookup with a new partner (Fielder & Carey, 2010; Lindgren et al., 2009; Paul & Hayes, 2002). Women are more likely to feel more confident engaging in sexual behavior under the influence of alcohol but are more prone to ineffectively using a barrier method during sex due to inhibition (Ingersoll, 2008).

Cultural Campus Norms and Hookup Culture as an Indicator for Condom Usage
among Sexually Active Emerging Adults

In order to fully understand why emerging adult men and women are engaging in condomless sex, researchers must address the subjective norms of the environment in which college students live, go to class, and participate in extracurricular activities. Understanding the environmental influences are a cue of the social norms currently present on a college campus. The Theory of Social Norms indicates behavior is influenced by individuals perceiving how other members of their social group behave in certain health risk situations (i.e. binge drinking, sexual encounters, drug misuse/abuse etc.); however, these perceived ideals are often incorrect (Scholly, Katz, Gascoigne, & Holck, 2005).

The relevance of social norms of alcohol usage on college campuses has been reviewed within the academic literature; however, there is little literature addressing the impact of social norms on sexual health (Scholly et al., 2005). Condom usage can be seen within a negative context, due to its ability to make an individual seen as “unclean”; therefore, the perception of consistent condom usage is low on college campuses (Scholly et al., 2005). This low perception of consistent condom usage has created a norm on college and university campuses in which their fellow peers have higher levels of sexual partners but lower levels of condom usage.

Hookup culture has become a normative factor which can be seen across different universities throughout the United States. The hookup culture has received large amounts of attention from the mainstream media which attempts to portray hookup culture within the popular media networks (Fielder et al., 2013; Stinson, 2010). The area of research

surrounding hookup culture is still relatively new; most studies surrounding hookups and hookup cultures started emerging around the millennium (Stinson, 2010). It is important to note, while there is no single universally-accepted definition for hookups and hookup culture, the script shared across college and university campus are similar (Fielder et al., 2013). According to a study conducted by Glenn and Marquardt (2001) that examined the different meanings of “hookups” and the shift in dating culture across the country to help define hookups as the “sex-without-commitment interactions between college women and men”. Therefore, after engaging in sexual activity, there is no need to expect anything further from the temporary partner.

Formal dating and dating in general is no longer the core of campus norms (Stinson, 2010). Additionally, engaging in sex outside of committed relationships has also become a normative factor within college campus norms (Fielder et al., 2013; Glenn & Marquardt, 2001; Stinson, 2010). The social script for hooking up is much different than committed relationships or dating for potential relationships. The script for hooking up, within a college setting, involves alcohol as a social lubrication and originates from a night out at parties and bars (Bogle, 2008; Grello et al., 2006; Stinson, 2010). The script is initiated by flirtation, which is followed by some type of sexual interaction (with little to no communication) and ends when one person leaves, the encounter ends or one of the partners passes out (Grello et al., 2006). Resulting in no initiation for partnership or commitment due to the feeling of awkwardness or uncomfortability with the engagement after it is over. Hooking up can be correlated to “heat of the moment” with no intentions of further engagement.

Theory of Reasoned Action

There is a gap in the literature examining the correlation between the influences on behavioral and attitudinal intentions on emerging adult women and their influences of engaging with or without a condom in hookup culture. While research has examined the Theory of Reasoned Action (TRA) in determining rates of HIV transmission and condom usage, there is no specific study that has examined the TRA's grounded approach to condom use intention as a whole in the prominence of hookup culture on college and university campuses across the country. The application of TRA to reducing transmission of HIV/AIDs has been effective on the transmission of HIV (Muñoz-Silva et al., 2007). Overall, the Theory of Reasoned Action is a successful theoretical framework for predicting condom use intention, especially in STI and AIDS transmission (Albarracín et al., 2001)

The Theory of Reasoned Action is one of the most important social psychological theories for predicting and understanding health behaviors. The TRA examines the importance of behavioral intention is to the immediate actions (e.g. engaging in condomless sex) by examining the attitudes and subjective norms influencing the overall behavior (Sheeran & Taylor, 1999). This differs for mens' predictors which is more of a subjective norm influence.

Conclusion

Although research has shown a linkage between perceptions and attitudes towards condom use intention (such as the influence of hookup culture and other determinants as noted above) few studies have fully examined the full influences on why women continue to engage in condomless sex despite more overall protective factors. A study conducted by Lollis and colleagues (1997) has examined the theoretical underpinning and predictability of condom usage and risky sexual practices for university students by using predictive utility of the Health Belief Model and determined that it was beneficial at predicting condom usage in college students (Lollis et al., 1997).

Additionally, another study by Tung and colleagues (2009) examined the Trans-Theoretical Model and the stages of contemplation for condom use in which college students go through when making the decision on whether or not to engage in condom use (Tung, Farmer, Ding, Tung, & Hsu, 2009). This study found students who were identified within the action and maintenance stage of the TTM, found more perceived benefits for engaging in condom use. By examining previous theoretical literature, there is a necessity to apply the theoretical model of the Theory of Reasoned Action to explore the attitudes and influences on which emerging adult women continue to engage in condomless sex in order to predict condom use intention at their next sexual encounter.

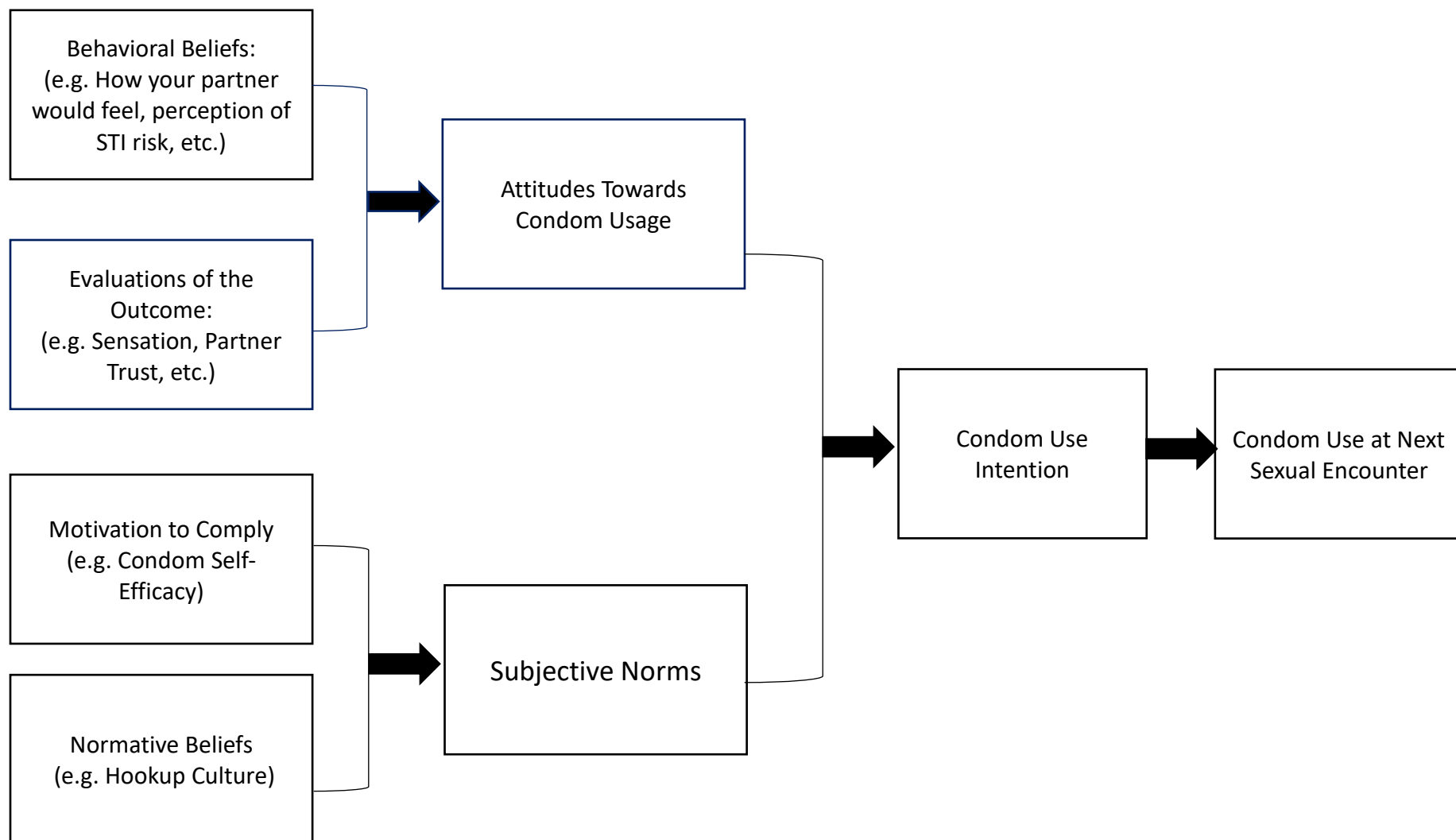


Figure 1: *Theory of Reasoned Action and condom use intention*

CHAPTER III

METHODS

Study Design

This thesis study utilized a quantitative research design. Between February 2018 and March 201, emerging adult women residing at a public land-grant university in Oklahoma received an invitation to participate in a study titled “Women’s Health Perception Study”, which focused on the influences of condom usage at their next sexual encounter. A multifaceted approach was used to explore the different influences experienced by college women on a regular basis that might have an influence on condomless sexual behavior. Prior to the initiation of the study, procedures were approved by the Institutional Review Board (IRB) at Oklahoma State University in Stillwater, Oklahoma.

Participant Recruitment

Development of study instruments and recruitment procedures were conducted collaboratively between the investigator and the thesis committee. Recruitment efforts combined internet-based direct marketing, social media marketing, random email sampling, chapter meeting announcements and flyer postings.

In collaboration with the university online research system (SONA Systems), and OSU office of Institutional Research & Information Management (IRIM) there was a random sample of full-time students between the ages 18-24 who were provided with a unique link to the online survey. If a participant was recruited via email, an initial email was sent requesting participation. The importance of the study was outlined within the email. Reminder emails were sent approximately one-week after the initial email was sent. No further contact with participants were made after the reminder email was sent.

Within the survey, the participants answered questions based on their sexual health history, attitudes towards condom usage, drug and alcohol history, self-esteem levels, condom use self-efficacy (one's belief in their ability to influence their partner to use a condom), perceptions on gender roles in sexual health and their intention towards condom usage at their next sexual encounter.

Procedures

Participants were recruited using the university online research system (Sona Systems), OSU IRIM email sample, internet-based direct marketing initiatives and purposive approaches in order to optimize the number of sexually active emerging adult women for this study. Participation in this study was voluntary and an incentive to participate in the study was offered to the participants. If the participant completed the study, they were entered for a chance to win one of ten \$20 Amazon gift cards. The probability of winning one of the gift cards was 2.1% due to 478 respondents fully completing the study. After completion of the main questionnaire, participants were redirected to a separate survey to enter the drawing to maintain participant confidentiality.

Respondents were eligible to participate in the study if they were 18 years of age, a student of Oklahoma State University and have reported that they are/or have been sexually active and are unmarried. Qualtrics, via the Sona Systems, housed both the electronic consent form and the online questionnaire. Respondents who provided electronic consent were allowed to proceed with the online questionnaire. All study procedures and recruitment efforts were approved by the Institutional Review Board at Oklahoma State University.

Measures

Sociodemographic Characteristics. Sociodemographic information was gathered via single-item measures of age, race/ethnicity, sexual orientation, education, relationship status and length, social involvement, and have they ever been sexually active – and if so, within the past year and contraceptive use.

Attitudes Towards Condom Usage. To assess the level of attitudes towards condoms and condom usage during sexual encounters, the 25-item UCLA Multidimensional Condom Attitudes Scale developed by Helweg-Larsen and Collins (1994) was administered. The MCAS assess five independent factors that are associated with condom use: (1) reliability and effectiveness, (2) sexual pleasure, (3) stigma, (4) embarrassment about negotiating and using condoms, and (5) embarrassment about purchasing condoms. There is overwhelming previous literature stating the reliability and validity of the MCAS in a wide range of participants in varying populations. Further, there is established internal consistency for both men and women separately, with acceptable Cronbach's alpha values for each population.

Self-Esteem. To assess levels of self-esteem, the Rosenberg Self-Esteem Scale was administered. The 10-item scale measures global self-worth measuring both positive and negative feelings about one's self-worth. It is easily administered on a 4-point likert scale (*strongly agree to strongly disagree*) and is a widely utilized measure that captures the multidimensional factors of self-esteem and self-worth. This scale examines the distinctive of three positive thinking variables (self-esteem, trait hope, and positive attributional style) by asking questions related to "overall satisfaction with one's self", "feeling useless", "holding good qualities", etc (Rosenburg, M. 1965). The Rosenberg Self-Esteem Scale has a Guttman scale coefficient of reproducibility of .92, indicating excellent internal consistency. RSE also has test-retest reliability over a period of 2 weeks with correlations of .85 and .88, indicating excellent stability.

Condom Self-Efficacy. The Condom Use Self-Efficacy Scale (CUSES) is a 28-item questionnaire developed for the use of condom self-efficacy among college students. It is administered on a 5-point likert scale (*strong agree to strongly disagree*) measuring confidence in properly putting and taking off a condom, condom negotiation with a new partner, and the ability to influence a new partner to use a condom. Overall, there is reliability in the literature (Cronbach's Alpha = .91) and correlational success with attitudes towards condom use via MCAS. This survey is useful not only for its measures of self-efficacy but also the measurement of the individual's perception on his or her ability to perform the specific behaviors of condom use.

Gender Roles and Sexual Double Standards. The Double Standard Scale is a 10-item scale arranged in a 5-point Likert format with options ranging from strongly agree to strongly disagree. The total score is obtained by summing the total but reversing the negative (*Is it acceptable for a woman to carry condoms?*). Overall, this scale determines the attitudes towards sex roles of men and women, in addition to condom use. This scale is considered reliable and reliable across different populations with men and women regarding condom use.

Condom Use Intention. In order to assess condom use at the next sexual encounter, a 3-item scale ($\alpha = .88$) from a study conducted by Baele and colleagues, (Baele, Dusseldorp, & Maes, 2001) was used. In lieu of a condom use intention scale being developed specifically for females, this study has reliability within its measure. Intention will be assessed by summing preference, intention, and actual use for condoms with a new partner.

Alcohol and Drug Use. In order to get an understanding of alcohol and substance use in emerging adult women. A questionnaire assessing drug and alcohol use in the past thirty days was used to assess the influence of alcohol and drugs on condom use intention.

Data Analysis

In order to evaluate intention to use a condom at the next sexual encounter, multiple linear regression analysis was used in order to assess the influence of alcohol and substance use, condom self-efficacy, gender roles and sexual double standards, self-

esteem, and attitudes towards condom use. The study controlled for age, relationship status, and contraceptive use, in addition to baseline intention.

CHAPTER IV

RESULTS

In order to determine if there is a relationship between condom use intention and attitudes towards condoms, condom self-efficacy, self-esteem, and sexual double standards, an online study was administered to emerging adult women aged 18-24 residing at a public land grant university in Oklahoma. Recruitment procedures included SONA systems, a random email sample from OSU IRIM, internet-based direct marketing initiatives via social media, chapter announcements, and flyer postings. Each recruitment method had its own unique link to the online study. Recruitment efforts were tracked based on the number of respondents with the corresponding unique link assigned at the beginning of the study. The participants had approximately one-month to complete the online study before the study closed to any new participants.

Descriptive Statistics of the Sample

In total, there were 478 participants who fully completed the online study. However, 192 participants were excluded for not meeting inclusion criteria of being an unmarried, sexually active female at Oklahoma State University. Although data was collected and complete for all of the participants, the following results do not reflect the admission of the excluded participants.

Therefore, for the purpose of this study, $n = 286$. Table 1 and Table 1A describe the descriptive statistics of the sample. Participants ranged in age from 18 to 24 ($M = 21.12, SD = 1.59$) and all participants identified as female (100.0%). In terms of ethnicity, 71.0% (203) identified as White, Non-Hispanic, sixteen (5.6%) participants identified as Black/African American, twenty-four participants (8.4%) identified as Hispanic/Latino, nine participants (3.1%) identified as Asian/Pacific Islander, fifteen (5.2%) identified as Native American/Alaskan, and seventeen (5.9%) identified as biracial or multiracial. The majority of the participants identified as a junior (26.2%) or seniors (25.5%) in college, with the rest identifying as a freshman (7.7%), sophomore (14.7%), 5th year senior or unclassified (7.3%), or as a graduate student (18.2%).

Participants represented different areas of academic focus across Oklahoma State University's campus: The largest representation came from the college of Arts & Sciences (30.1%), 17.8% identified with the college of Education, Health and Aviation, 14.7% identified with the college of Human Sciences, 11.5% identified with Spears School of Business, 17.5% of participants identified with Agricultural Sciences and Natural Resources, and 6.6% of participants identified with the college of Engineering, Architecture and Technology. Five participants (1.7%) did not select a college due to identifying with the graduate college.

Socially, 203 of the 286 participants identified with one or more social group within the university setting, see Table 1 for more detailed information. The majority of the participants (28.0%) identified with a social sorority and 16.1% of participants identified with a religious community. Further, 2.1% of participants identified as belonging to a university athletic team, 8.4% identified with belonging to an intramural

athletic team, 3.5% identified as belonging with the university band program, and 5.2% of participants are members of a service fraternity or sorority. Additionally, twenty-two participants (7.7%) responded as belonging to a different organization – these responses ranged from residential assistants, student government associations, and various local community organizations.

In regard to sexual orientation, the majority of participants (89.2%) identified as Heterosexual or straight, two participants (.7%) identified as gay or lesbian, and (9.8%) identified as bisexual. An overwhelming majority of participants, one-hundred and eighty-four (64.3%) are currently in a relationship. Of those participants in a relationship, 50.0% were in a relationship but not living together, and 14.3% of participants in a relationship were living together (please see table 1A for relationship length). The reminder of the participants (35.0%) of participants identified as single/never married and one participant identified as divorced. Of the 286 participants, 251 of participants had vaginal intercourse within the past year. The majority of the participants indicated they take some sort of birth control (67.8%), while only 32.2% said they currently do not take any form of birth control. The most popular method of birth control among these participants was birth control pills (51.4%), only one participant indicated they use the patch (.3%), six participants selected using Nuvaring (2.1%), for both Depo-Provera and copper IUD accounted for 1.7% of sample (five participants per method), seventeen participants indicated hormonal IUD as their method of birth control (5.9%), and thirteen participants identified as having the Nexplanon (arm implant) as their birth control method.

Table 1. Sociodemographic Characteristics of the Sample (n = 286)

	N	%	M	SD
Age			21.12	1.59
18	10	3.5		
19	41	14.3		
20	56	19.6		
21	66	23.1		
22	49	17.1		
23	41	14.3		
24	23	8.0		
Race/ethnicity				
Black/African American	16	5.6		
Hispanic/Latino	24	8.4		
White, non-Hispanic	203	71.0		
Asian/Pacific Islander	9	3.1		
Native American/Alaskan	15	5.2		
Biracial/Multi Racial	17	5.9		
Grade Classification				
Freshman	22	7.7		
Sophomore	42	14.7		
Junior	75	26.2		
Senior	73	25.5		
5 th Year Senior/Other	22	7.3		
Graduate Student	52	18.2		
College Identification				
Agricultural Sciences and Natural Resources	50	17.5		
Arts and Sciences	86	30.1		
Spears School of Business	33	11.5		
Education, Health and Aviation	51	17.8		
Engineering, Architecture and Technology	19	6.6		
Human Sciences	42	14.7		
Other	5	1.7		
Social Groups	203			
University Athletic Team	6	2.1		
Intramural Athletic Team	24	8.4		
Band	10	3.5		
Social Sorority	80	28.0		
Service Sorority/Fraternity	15	5.2		
Religious Community	46	16.1		
Other	22	7.7		

Table 1A. Sociodemographic Characteristics of the Sample: continued (n = 286)

	N	%	M	SD
Sexual Orientation				
Heterosexual or straight	255	89.2		
Gay or Lesbian	2	.7		
Bisexual	28	9.8		
Relationship Status				
Single/Never Married	100	35.0		
In a relationship (not living together)	143	50.0		
In a relationship (living together)	41	14.3		
Divorced	1	.3		
Relationship Length	184			
Less than 6 months	21	7.3		
More than 6 months to 1 year	36	12.6		
More than 1 year to 3 years	84	29.4		
More than 3 years to 5 years	26	9.1		
More than 5 years	2	5.9		
Contraceptive Use				
Yes	194	67.8		
No	92	32.2		
Contraceptive Type				
Birth control pills	147	51.4		
Patch	1	.3		
Nuvaring	6	2.1		
Depo-Provera/the "shot"	5	1.7		
IUD copper	5	1.7		
IUD hormonal	17	5.9		
Nexplanon (arm implant)	13	4.5		
Vaginal intercourse w/in past year				
Yes	251	87.8		
No	35	12.2		

Statistical Results of the Sample

A multivariate analysis (refer to Table 3) was run to predict condom use intention from attitudes towards condom use, self-esteem, sexual double standards influenced by stereotypical gender norms, and condom self-efficacy. Results of the multiple linear regression indicated that there was a collective significant effect between condom use intention, attitudes towards condom use, self-esteem, sexual double standards and condom self-efficacy, $F(4, 281) = 13.176$, $p < .001$, $R^2 = .158$. The individual predictors were examined further and indicated that attitudes towards condom use from the UCLA Multidimensional Condom Attitudes Scale ($t = -4.656$, $p < .001$) and condom self-efficacy from the Condom Use Self-Efficacy Scale ($t = 4.310$, $p < .001$) were significant predictors of emerging adult women's intention for condom use at their next sexual encounter. Additionally, individual predictors for self-esteem from the Rosenberg Self-Esteem Scale ($t = -.893$, $p > .005$) and sexual double standards using the Sexual Double Standards Scale ($t = 1.302$, $p > .005$) were not significant predictors for condom use intention.

A partial correlation was run to determine the relationship between both condom use intention and attitudes towards condoms whilst controlling for age, contraceptive use, and relationship status. There was a moderate, negative partial correlation between condom use intention (13.80 ± 2.307) and attitudes towards condoms (74.59 ± 11.297) whilst controlling for age (21.12 ± 1.594), contraceptive use ($1.32 \pm .468$) and relationship status ($1.83 \pm .806$), which was statistically significant, $r(280) = -.315$, $N = 286$, $p < .001$. However, zero-order correlations showed that there was a statistically significant, moderate, negative correlation between condom use intention and attitudes

towards condom use ($r(283) = -.307$, $n = 286$, $p < .001$), indicating that age, contraceptive use and relationship status had little influence in controlling for the relationship between condom use intention and attitudes towards condom use.

Additionally, another partial correlation was run to determine the relationship between both condom use intention and condom self-efficacy whilst controlling for age, contraceptive use, and relationship status. There was a moderate, positive partial correlation between condom use intention (13.80 ± 2.307) and condom self-efficacy (88.60 ± 7.601) whilst controlling for age (21.12 ± 1.594), contraceptive use ($1.32 \pm .468$) and relationship status ($1.83 \pm .806$), which was statistically significant, $r(280) = .299$, $N = 286$, $p < .001$. However, zero-order correlations showed that there was a statistically significant, moderate, negative correlation between condom use intention and attitudes towards condom use ($r(283) = .296$, $n = 286$, $p < .001$), indicating that age, contraceptive use and relationship status had little influence in controlling for the relationship between condom use intention and condom self-efficacy.

<i>Table 2. Regression of predictor values in conjunction with condom use intention</i>						
Source	R^2	β	sr^2	df	F	P
Overall	.158			4, 285	13.176	$p < .001$
Predictor Variables						
UCLA Multidimensional Condom Attitudes Scale		-.280	-.255	1, 285		.001
Rosenberg Self-Esteem Scale		-.049	-.049	1, 285		.373
The Sexual Double Standards Scale		.077	.071	1, 285		.194
The Condom Use Self-Efficacy Scale		.242	.236	1, 285		.001

Substance Use

Of the 286 participants, 71 participants indicated they had used at least one substance (not including alcohol, tobacco, or prescribed medications) in the past 30 days. Substances included marijuana, ADHD medications, MDMA/ecstasy, cocaine, anabolic steroids, and other psychedelics. The most popular substance reported was marijuana with 62 of 71 respondents indicating they had used marijuana in the past 30 days. Followed by ADHD medications with 19 participants indicating they abused ADHD medications in the past 30 days. Other substance use included MDMA/ecstasy (two participants), cocaine and anabolic steroids were reported by one participant, followed by other psychedelics being reported by two participants. Notably, the most reported substance in conjunction with another substance was marijuana use and ADHD medications (thirteen participants of the sixty-two self-identified marijuana users).

Alcohol use among emerging adult women at Oklahoma State University was much higher than other reported substances. Only thirty-five participants indicated they had not had alcohol in the past four weeks. Overall, 109 participants reported having three or more drinks on any one day of normal drinking, while sixty participants (21.0%) reported having six to nine drinks on any one day, and twenty-five participants (8.7%) reported having ten or more drinks on any one day. Further, one hundred and thirty-seven participants (19.9%) indicated only having one or two drinks at any one time. While eighty-five participants (38.1%) reported having three to five drinks at any one time, which meets the criteria for binge-drinking for women. Further, an additional twenty-one participants indicated they had six to nine drinks in one setting, five participants reported ten to nineteen drinks in one setting, and one participant reported more than twenty

drinks in one setting. The data collected for more than six drinks in one setting reflects heavy episodic drinking or double-binge drinking.

A multiple linear regression was calculated to predict condom use intention at the next sexual encounter in conjunction with alcohol and substance use. There was not a statistically significant correlation between condom use intention and substance use ($p > .05$). Further, the correlation between alcohol and condom use intention was slightly more significant than substance use ($p = .105$).

<i>Table 3: Alcohol and Substance Use in the last 30 days</i>		
	N	%
Substance Use – Past 30 Days	71	
Marijuana	62	21.7
ADHD medications	19	6.6
Salvia	0	
MDMA/Ecstasy	2	0.7
Cocaine	1	0.3
Methamphetamines	0	
Rohypnol	0	
Amphetamines	0	
Heroin	0	
Other psychedelics	2	0.7
Anabolic steroids	1	0.3
Inhalants	0	
Alcohol Use – Most drinks on any one day.		
0 – Do not drink	35	12.2
1-2 drinks	57	19.9
3-5 drinks	109	38.1
6-9 drinks	60	21.0
10-19 drinks	20	7.0
20-39 drinks	5	1.7
40+ drinks	0	0
Alcohol Use – Number of drinks at one time.		
0 – Do not drink	37	12.9
1-2 drinks	137	19.9
3-5 drinks	85	38.1
6-9 drinks	21	21.0
10-19 drinks	5	7.0
20-39 drinks	1	1.7
40+ drinks	0	0

CHAPTER V

CONCLUSION

This thesis study aimed to predict what influences emerging adult women's condom use intention and to better understand why they continue to engage in condomless sex despite more overall protective factors. The primary purpose was to examine the utility of the Theory of Reasoned Action by providing a grounded theoretical approach in predicting condom use intention among emerging adult women at their next sexual encounter.

Although there are many factors and predictors on why emerging adult women engage in condomless sex, this study examined the correlation between attitudes towards condom use, condom self-efficacy, sexual double standards and the influence on self-esteem. This thesis represents one attempt to separate out and better understand various themes that connect condom use intention and condomless sex as a multifaceted approach instead of looking at one individual construct. In the sample of 18-24 emerging adult women residing at Oklahoma State University, it was found that attitudes towards condom use and condom self-efficacy predicted condom use intention at their next sexual encounter.

The Theory of Reasoned Action and Condom Use Intention

Results of the multivariate analysis indicated the data produced a grounded theoretical approach in predicting condom use intention among emerging adult women. The results found within this study replicate studies examining the interplay between men's condom use intention and predicting actual condom use (Abernathy et al., 2010). While also supporting the Theory of Reasoned Action's successful ability to overall predict condom use among adults (Albarracín et al., 2001).

Examining emerging adult women's attitudes towards condom use, using the UCLA Multidimensional Condom Attitudes Scale, revealed ($t = -4.656$) emerging adult women from this population have an overall lower attitude towards condoms (which contained elements of subjective norms) though condom use intention is high, actual condom use would be low at their next sexual encounter. This claim is supported within the literature that overall positive affective attitudes towards condoms and condom use is a predictor of greater likelihood to use condoms at their next sexual encounter (Bryan et al., 1996; Fielder et al., 2013; Roberts & Kennedy, 2006).

Condom self-efficacy is one of the biggest predictors of condom use intention and actual condom utilization (Baele et al., 2001). Condom self-efficacy, measured by the Condom Use Self-Efficacy scale, was positively, significantly related to condom use intention among emerging adult women ($t = 4.310$). Though attitudes towards condoms, which included embarrassment of buying and negotiation of condoms, overall self-efficacy in ability to suggest and properly use condoms was high. Within the TRA of a high level of condom self-efficacy gives notion to high levels of perceived behavioral

control and motivation to comply, which transfers to higher levels of condom use intention.

Specifically, the TRA predicts behavioral intent is created by attitudes and subjective norm (Fishbein & Ajzen, 1975); subjective norms are composed of both motivation to comply (internally with self-efficacy) and normative beliefs (externally with other individuals) (see Figure 2). Therefore, the results of this study show a conflicting struggle between high internal motivation to comply with high levels of condom self-efficacy, and nonspecific results with sexual double standards, which could argue an overall positive normative belief with condom use, especially between condom use negotiation between genders. However, attitudes towards condoms are negative, leaving a need to strengthen the attitudes towards condom use intention, which will support the overall persuasive goal of condom use at their next sexual encounter.

This study has revealed emerging adult women's reasoning for engaging in condomless sex as a complex issue by having conflicting internal thoughts; attitudes towards condom use being low, but condom self-efficacy being high. This further establishes the need for further research within this realm of sexual health in order to better understand the complexity of emerging adult women.

Limitations

There are several notable limitations within this research study. First, this study relied on convenience online sampling, not random sampling. The present study employed purposeful sampling of emerging adult women within the context of one university. With the entire sample residing at the same university in Oklahoma, the results of this study may not generalize well to other emerging adult women residing at different universities throughout the country due to regional differences that may only be present within Oklahoma. Participants were recruited through only one SONA system, which is housed among one college within the university-system, social media sites, and chapter announcements within one social setting – Greek life.

Further, this study relied on self-reported data which is limited by the fact that it rarely can be independently verified. Additionally, due to the nature of the personal questions involving sexual health and substance use, selective memory and attribution of condom use could have occurred. In order to have a better understanding of hookup cultures influence on attitudes towards condom use and subjective norms, a qualitative approach (in addition to quantitative) can help provide more framework of baseline intention in addition to overall protective factors. Additionally, qualitative methodology can provide a probe to better understand consistency in condom use among emerging adult women in regards to both new and stable partners.

Though participants in this study scored positively statistically significant in condom self-efficacy and had overall belief within themselves to use condoms, it is important to note condom self-efficacy is a multidimensional variable with many interwoven and complex principles creating the dimension (Baele et al., 2001) with no

global definition. Future research should continue to examine the correlation of condom self-efficacy and condom use intention among emerging adult women to have a more stable definition in regard to this population.

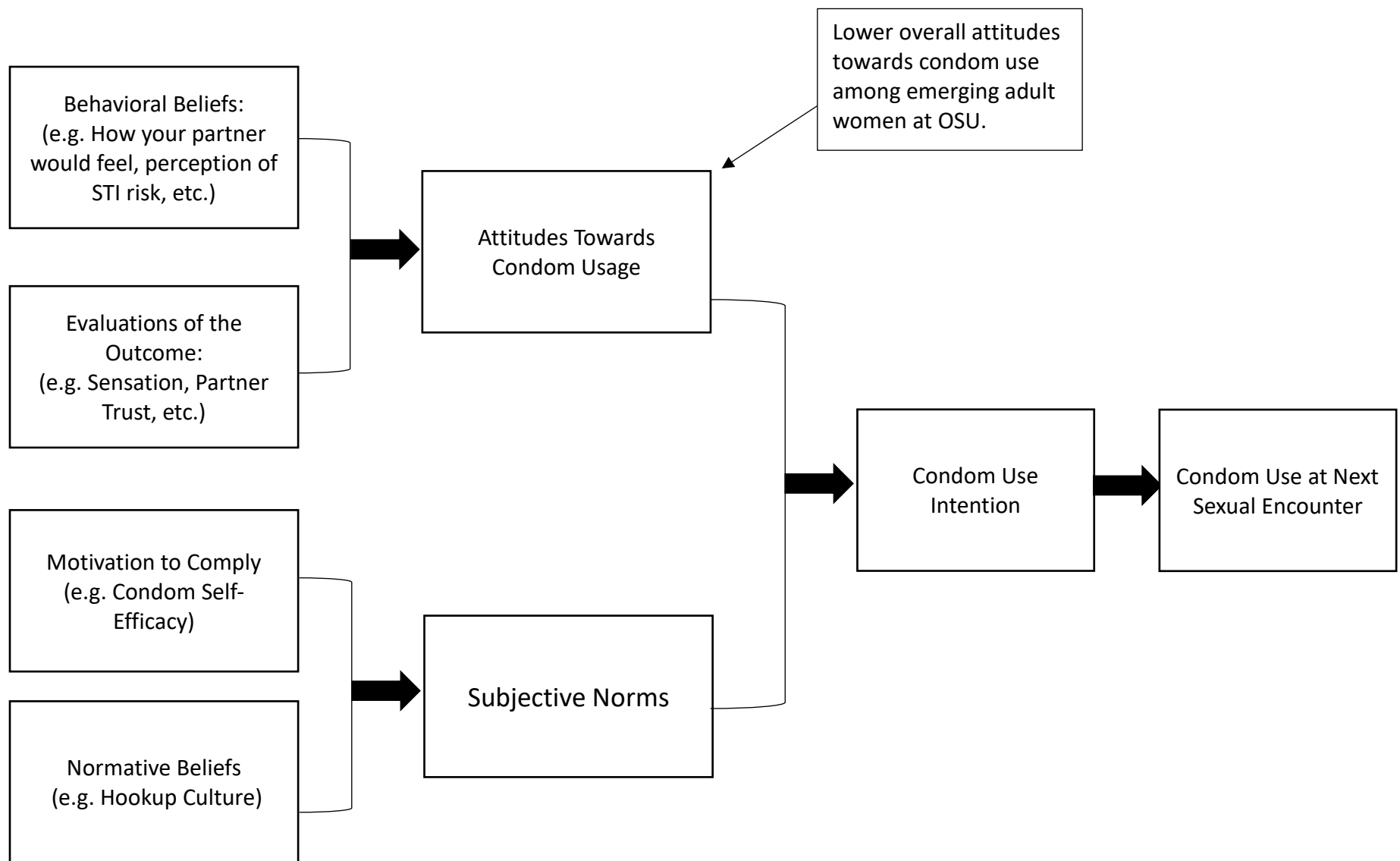


Figure 2: The Theory of Reasoned Action predicting condom use intention with emerging adult women at a public land grant university.

Study Implications

Although the findings from this study are primarily intended to aid in the understanding the influences of condomless sex in emerging adult women, these findings have several implications for future public health research and for health promotion interventions, programming and policies. The results in this study show the importance in addressing the multiple areas of condom use intention to reduce high levels of STI and unplanned pregnancies in Oklahoma. Failure to fully address the multiple areas of influence for condom use intention among emerging adult women will result in continual and elevated risky sexual behaviors.

The attitudes towards the behavior (condom use) is assumed to be a function of one's beliefs; therefore, one is more likely to have a positive attitude towards condoms if they personally believe there is a positive outcome from condom use and prevents negative outcomes from happening to them personally. This tailored approach for emerging adult women at Oklahoma State University can be used for successful programming. By creating prevention programming and prevention efforts whose goal is to raise overall attitudes towards condoms by creating a positive outcome such as less remorse after sex with a new partner or sex is more enjoyable with condoms versus without condoms. Additionally, there may be some benefit to simultaneously focusing on the prevented negative outcome from consistent condom usage (regardless of partnership length) such as transmitting or being exposed to a sexually transmitted infection, and unplanned pregnancy. Further, public health programming focusing on the normativity of buying condoms and reducing embarrassment surrounding overall condom use can increase a more positive normative belief towards condoms overall. Further, results of

this study can help target interventions for emerging adult women by increasing steady-partner condom use, condom use with new partners, and can help provide a base to change perceived subjective norms by targeting attitudinal beliefs surrounding condom use within hookup culture.

The findings of this study suggest the need for policy interventions that could indirectly target emerging adult women not only on the individual and group level, but before the 18-24-year-olds enter into the college/university setting. Currently, Oklahoma has no mandate for comprehensive sex education within the public-school system. The Oklahoma Department of Education does not mandate any sexual health programming or comprehensive sex education requirements for any of the 520 education districts in Oklahoma (Oklahoma Department of Education, 2018). Oklahoma is one of twenty-nine states where comprehensive sex education is not mandated (Guttmacher Institute, 2018). While Oklahoma does require HIV/AIDS-prevention education in schools, abstinence only education is stressed and parents are notified before and are allowed to opt their children out of the education session (Guttmacher Institute, 2018; Oklahoma Department of Education, 2018). Further, HIV education in Oklahoma teaches "homosexual activity" is considered to be "responsible for contact with the AIDS virus" creating a mentality within women that HIV/AIDS cannot be contracted if they identify as heterosexual (Guttmacher Institute, 2018). As of April 1, 2018, only Tulsa Public School district teaches comprehensive sex education addressing condom use, STI prevention, contraception choices, etc. Reforming and tailoring sex education within Oklahoma from "abstinence only" to comprehensive sex education can help shape positive attitudes towards condom use, reduce embarrassment, increase condom self-efficacy, and teach the

importance of the male condom for both parties. Addressing holistic sexual health before emerging adult women ever enter into the college/university setting can provide the knowledge and framework they need in order to have a healthy sexual relationship while increasing higher levels of perceived behavioral control which will aid in protecting themselves from unplanned pregnancy and STI's.

Conclusion

In summary, the present study explored the reasoning for emerging adult women's willingness to engage condomless sex at a land grant university in Oklahoma. Addressing the multiple areas of influence such as perceived behavioral control, attitudes towards condom use, subjective norms, condom self-efficacy, and alcohol/substance use may be beneficial in normalizing condom use from a female perspective.

Additional research is needed surrounding condom-use intention in women to fully explore and understand what leads emerging adult women to engage in condom use at their next sexual encounter. Development of an empirically sound condom use intention scale for women can aid in previous literature surrounding women's sexual health such as condom self-efficacy (Albarracín et al., 2001; Baele et al., 2001), hookup culture (Fielder et al., 2013; LaBrie et al., 2014), self-esteem (Ethier et al., 2006; Fielder et al., 2013; Gullette & Lyons, 2006), and alcohol/substance use (Caldeira et al., 2009; Dvorak et al., 2016; Fielder et al., 2013). Ultimately, future research is needed to fully understand the multiple variables surrounding condomless sex in emerging adult women in order to ensure risk behaviors from every section have been addressed to increase condom use intention.

APPENDICES

Variables	Demographic Questionnaire
AGE	1. How old are you? ###
DOB	2. What is your date of birth? mm/dd/yyyy
ETH	3. What is your primary race or ethnic identification? (Select one) 1 = Black/African American 2 = Hispanic/Latino 3 = White, not of Hispanic origin 4 = Asian/Pacific Islander 5 = American Indian/Alaskan 6 = Another Race/Ethnicity 7 = Biracial/Multiracial 8 = Refuse to answer
OSU	4. Are you currently a student at Oklahoma State University? 1 = Yes, full-time Undergraduate (12 or more credit hours) 2 = Yes, part-time Undergraduate (less than 12 credit hours) 3 = Yes, full-time Graduate student (9 or more credit hours) 4 = Yes, part-time Graduate student (less than 9 credit hours)
EDU	4a. What is your grade classification? 1 = Freshman 2 = Sophomore 3 = Junior 4 = Senior 5 = 5 th Year Senior/Other 6 = Graduate student 98 = Refuse to Answer
GRAD	4b. (If response is 6 from above), What is your Master or Doctoral Program? XXXX
COL	5. In what college is your major housed? 1 = Agriculture Sciences and Natural Resources

	<p>2 = Arts and Sciences 3 = Spears School of Business 4 = Education, Health and Aviation 5 = Engineering, Architecture and Technology 6 = Human Sciences</p>
AG	<p>5a. (If response is 1 from above) What is your major? 1 = Agribusiness 2 = Agricultural Communications 3 = Agricultural Economics 4 = Agricultural Education 5 = Agricultural Leadership 6 = Animal Science 7 = Biochemistry and Molecular Biology 8 = Biosystems Engineering 9 = Entomology 10 = Environmental Science 11 = Food Science 12 = Horticulture 13 = Landscape Architecture 14 = Landscape Management 15 = Natural Resource Ecology and Mgmt 16 = Plant Soil Science 17 = Pre-Professional Programs 18 = Other/Not Listed</p>
A&S	<p>5b. (If response is 2 from above) What is your major? 1 = Aerospace Studies 2 = American Studies 3 = Art History 4 = Biochemistry 5 = Biological Science 6 = Chemistry 7 = Communication Sciences & Disorders 8 = Computer Science 9 = Creative Writing 10 = Economics 11 = English 12 = French</p>

	13 = Geography 14 = Geology 15 = Geospatial Information Science 16 = German 17 = Global Studies 18 = Graphic Design 19 = History 20 = Liberal Studies 21 = Mathematics 22 = Microbiology 23 = Military Science 24 = Multimedia Journalism 25 = Music 26 = Music Education 27 = Philosophy 28 = Physics 29 = Physiology 30 = Plant Biology 31 = Political Science 32 = Professional Writing 33 = Psychology 34 = Screen Studies 35 = Spanish 36 = Sports Media 37 = Statistics 38 = Strategic Communications 39 = Studio Art 40 = Theatre 41 = Zoology 98 = Other/Refuse to Answer
BUS	5c. (If response is 3 from above) What is your major? Accounting Economics and Legal Studies Entrepreneurship Finance General Business International Business Management

EHA	Management Science and Information Systems Marketing Other 5d. (If response is 4 from above) What is your major? Aerospace Administration and Operations Applied Exercise Science Career & Technical Education Sports & Coaching Science Elementary Education Health Education and Promotion Recreation Management and Recreational Therapy Physical Education Secondary Education OSU Teach Other
CEAT	5e. (If response is 5 from above) What is your major? Aerospace Engineering Architectural Design Architectural Engineering Biosystems Engineering Chemical Engineering Civil Engineering Computer Engineering Construction Management Techonology Electrical Engineering Electrical Engineering Technology Fire Protection and Safety Engineering Industrial Engineering and Management Mechanical Engineering Other
HS	5f. (if response is 6 from above) What is your major? Allied Health Apparel Design Child and Family Services Community Nutrition Dietetics Early Childhood Education

	Family and Consumer Sciences Education Hotel and Restaurant Administration Human Nutrition/Pre-Med Interior Design Merchandising Other
HONORS	6. Are you a member of the Honors College? 1 = No 2 = Yes 98 = Refuse to Answer 7. Do you identify with any of the following groups? Check all that apply. 1 = University Athletic Team 2 = Intramural Athletic Team 3 = Band 4 = Social Sorority/Fraternity 5 = Service Sorority/Fraternity 6 = Religious Community 7 = Other: Please Describe:
GENDER	8. Are you: (Select one) 1 = Male 2 = Female 3 = Transgender (Male to Female) 4 = Transgender (Female to Male)
SEXU_OR	9. Do you consider yourself to be: 1 = Heterosexual or straight 2 = Gay or lesbian 3 = Bisexual 98 = Prefer to not answer
SEXU_ACTIVE	10. Within your lifetime, have you ever had vaginal sex? Yes/no
SEXU_1YEAR	11. (If answer to 10 = yes) Have you had vaginal sex within the past year? 1 = Yes

	<p>2 = No 98 = Refuse to Answer</p>
CONTRA	12. Do you currently take birth control?
CONTRA2	<p>Yes (1)/no (2)</p> <p>9a. If you currently take birth control, what method? (Select one)</p> <p>1 = Do not take any form of birth control 2 = Birth Control Pills 3 = Patch 4 = Nuvaring 5 = Depo-Provera/the “shot” 6 = IUD 98 = Refuse to Answer</p>
RELST	<p>10. Describe your relationship status (Select one).</p> <p>1 = Single/never married/Never in a long term committed relationship 2 = In a committed relationship (not married and not living together) 3 = In a domestic relationship (living with committed partner) 4 = Married to a Man 5 = Married to a Woman 6 = Separated 7 = Divorced 8 = Widowed 99 = Other 98 = Refuse to answer</p>
RELST_TIME	<p>10a. (If answer to 8 = 2, 3, 4, 5) How long have you been in the relationship?</p> <p>1 = less than 6 months 2 = more than six months to 1 year 3 = more than 1 year to 3 years 4 = more than 3 years to 10 years 5 = more than 10 years</p>
	MCAS Multidimensional Condom Attitudes Scale
MCAS1	<p>11. It is really hard to bring up the issue of using condoms to my partner?</p> <p>1 = Strongly Disagree 2 = Disagree</p>

	3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS2	12. Use of a condom is an interruption of foreplay? 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS3	13. Women think men who use condoms are jerks? 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS4	14. Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted infections? 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS5	15. I always feel really uncomfortable when I buy condoms. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree

	4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS6	16. Condoms are unreliable. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS7	17. When I suggest using a condom I am almost always embarrassed. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS8	18. Condoms ruin the sex act. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS9	19. I think condoms are an excellent means of contraception. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree

<p>MCAS10</p>	<p>6 = Agree 7 = Strongly Agree</p> <p>20. I don't think buying condoms is awkward.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
<p>MCAS11</p>	<p>21. It is very embarrassing to buy condoms</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
<p>MCAS12</p>	<p>22. It is easy to suggest to my partner that we use a condom.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
<p>MCAS13</p>	<p>23. If a couple is about to have sex and the man suggests using a condom, it is less likely they will have sex.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>

MCAS14	<p>24. Condoms do not offer reliable protection.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
MCAS15	<p>25. Condoms are a lot of fun.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
MCAS16	<p>26. I never know what to say when my partner and I need to talk about condoms or other protection.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
MCAS17	<p>27. It would be embarrassing to be seen buying condoms in a store.</p> <p>1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree</p>
MCAS18	<p>28. People who suggest condom use are a little bit geeky.</p> <p>1 = Strongly Disagree 2 = Disagree</p>

	3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS19	29. The use of condoms can make sex more stimulating. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS20	30. Condoms are an effective method of birth control. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS21	31. I'm comfortable talking about condoms with my partner. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS22	32. Men who suggest using a condom are really boring? 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree

	6 = Agree 7 = Strongly Agree
MCAS23	33. When I need condoms, I often dread having to get them. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS24	34. A woman who suggests using condoms does not trust her partner. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
MCAS25	35. Condoms are uncomfortable for both parties. 1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = NA 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
	The Drug Abuse Screening Test (DAST-10) Yes = 1, No = 0 (Q3 is reversed scored)
DAST1	The following questions refer to the past 12 months:
DAST2	1. Have you used drugs other than those required for medical reasons?
DAST3	2. Do you abuse more than one drug at a time?
	3. Are you always able to stop using drugs when you want to? (If never used drugs, answer YES)
DAST4	4. Have you had “blackouts” or “flashbacks” as a result of drug use?

DAST5	5. Do you ever feel bad or guilty about your drug use? (If never used drugs, answer NO)
DAST6	6. Does your spouse (or parents) ever complain about your involvement with drugs?
DAST7	7. Have you neglected your family because of your drugs?
DAST8	8. Have you engaged in illegal activities in order to obtain drugs?
DAST9	9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
DAST10	10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?
Rosenberg Self-Esteem Scale (Items 2, 5, 6, 8, 9 are reverse scored)	
ROSEN1	1. On the whole, I am satisfied with myself. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
ROSEN2	2. At times I think that I am no good at all 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree
ROSEN3	3. I feel that I have a number of good qualities. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
ROSEN4	4. I am able to do things as well as most other people. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
ROSEN5	5. I feel I do not have much to be proud of. 1 = Strongly Agree

	2 = Agree 3 = Disagree 4 = Strongly Disagree
ROSEN6	6. I certainly feel useless at times. 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree
ROSEN7	7. I feel that I'm a person of worth, at least on an equal plane with others. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
ROSEN8	8. I wish I could have more respect for myself. 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree
ROSEN9	9. All in all, I am inclined to feel that I am a failure. 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree
ROSEN10	10. I take a positive attitude toward myself. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
	Sex Related-Alcohol Experiences (0 = Not at All, 1 = A Little, 2 = Some, 3 = Very Much) When I drink enough alcohol to feel the effects, I...

SRAE1 SRAE2 SRAE3 SRAE4 SRAE5 SRAE6 SRAE7 SRAE8 SRAE9 SRAE10 SRAE11 SRAE12 SRAE13	1. Feel less self-conscious. 2. Feel closer to a sexual partner. 3. Am a better lover. 4. Am more sexually responsive. 5. Am less nervous about sex. 6. Am more confident. 7. Become more forward. 8. Feel less shy. 9. Get horny (i.e. want to have sex) 10. Enjoy sex. 11. Have sex with people that I wouldn't have sex with when I was sober. 12. Am more likely to do something sexually that is risky. 13. Lose my inhibitions.
	Double Standard Scale (Q8 is reversed)
SEXUALDS1	1. It is expected that a woman be less sexually experienced than her partner. 1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree
SEXUALDS2	2. A woman who is sexually active is less likely to be considered a desirable partner. 1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree
SEXUALDS3	3. A woman should never appear to be prepared for a sexual encounter. 1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree

SEXUALDS4	<p>4. It is important that the men be sexually experienced so as to teach the women.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
SEXUALDS5	<p>5. A “good” woman would never have a one-night stand, but it is expected of a man.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
SEXUALDS6	<p>6. It is important for a man to have multiple sexual experiences in order to gain experience.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
SEXUALDS7	<p>7. In sex, the man should take the dominant role and the woman should assume the passive role.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
SEXUALDS8	<p>8. It is acceptable for a woman to carry condoms.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
SEXUALDS9	<p>9. It is worse for a woman to sleep around than it is for a man.</p> <p>1 = Strongly Agree 2 = Agree 3 = Undecided</p>

SEXUALDS10	<p>4 = Disagree 5 = Strongly Disagree</p> <p>10. It is up to the man to initiate sex. 1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree</p>
CONDOMINT1	<p>Condom Use Intention Scale</p> <p>1. With a new partner in the future, I would prefer to use a condom. 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree</p>
CONDOMINT2	<p>2. Do you intend to use a condom with a new partner in the future? 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree</p>
CONDONINT3	<p>3. Do you think you actually will use a condom when you have sex with a new partner? 1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree</p>
CUSES1	<p>The Condom Use Self-Efficacy Scale (Reverse scored 8,9,10,15,16,17,18)</p> <p>1. I feel confident in my ability to put a condom on myself or my partner. 0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree</p>

CUSES2	<p>4 = Strongly agree</p> <p>2. I feel confident I could purchase condoms without feeling embarrassed.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
CUSES3	<p>3. I feel confident I could remember to carry a condom with me should I need one.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
CUSES4	<p>4. I feel confident in my ability to discuss condom usage with any partner I might have.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
CUSES5	<p>5. I feel confident in my ability to suggest using condoms with a new partner.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
CUSES6	<p>6. I feel confident I could suggest using a condom without my partner feeling “diseased”.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
CUSES7	<p>7. I feel confident in my own or my partners ability to maintain an erection while using a condom.</p> <p>0 = Strongly Disagree</p>

	1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree
CUSES8	8. I would feel embarrassed to put a condom on myself or my partner. 4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree
CUSES9	9. If I were to suggest using a condom to a partner, I would feel afraid he or she would reject me. 4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree
CUSES10	10. If I were unsure of my partner's feelings about using condoms, I would not suggest using one. 4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree
CUSES11	11. I feel confident in my ability to use a condom correctly. 0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree
CUSES12	12. I would feel comfortable discussing condom use with a potential sexual partner before we ever had any sexual contact (eg, hugging, kissing, caressing, etc.) 0 = Strongly Disagree 1 = Disagree

	<p>2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES13	<p>13. I feel confident in my ability to persuade a partner to accept using a condom when we have intercourse.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES14	<p>14. I feel confident I could gracefully remove and dispose of a condom after sexual intercourse.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES15	<p>15. If my partner and I were to try to use a condom and did not succeed, I would feel embarrassed to try and use one again (eg, not being able to unroll condom, putting it on backwards or awkwardness).</p> <p>4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree</p>
CUSES16	<p>16. I would not feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I've had a past homosexual experience.</p> <p>4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree</p>
CUSES17	<p>17. I would not feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I have a sexually transmitted disease (STD).</p> <p>4 = Strongly Disagree 3 = Disagree</p>

	<p>2 = Undecided 1 = Agree 0 = Strongly agree</p>
CUSES18	<p>18. I would not feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I thought they had a sexually transmitted disease (STD).</p> <p>4 = Strongly Disagree 3 = Disagree 2 = Undecided 1 = Agree 0 = Strongly agree</p>
CUSES19	<p>19. I would feel comfortable discussing condom use with a potential sexual partner before we ever engaged in intercourse.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES20	<p>20. I feel confident in my ability to incorporate putting a condom on myself or my partner into foreplay.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES21	<p>21. I feel confident that I could use a condom with a partner without “breaking the mood”.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p>
CUSES22	<p>22. I feel confident in my ability to put a condom on myself or my partner quickly.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree</p>

<p>CUSES 23</p>	<p>4 = Strongly agree</p> <p>23. I feel confident I could use a condom using intercourse without reducing any sexual sensations.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
<p>CUSES 24</p>	<p>24. I feel confident that I would remember to use a condom even after I have been drinking.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
<p>CUSES25</p>	<p>25. I feel confident that I would remember to use a condom even I were high.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
<p>CUSES26</p>	<p>26. If my partner didn't want to use a condom during intercourse, I could easily convince him or her that it was necessary to do so.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>
<p>CUSES27</p>	<p>27. I feel confident that I could use a condom successfully.</p> <p>0 = Strongly Disagree</p> <p>1 = Disagree</p> <p>2 = Undecided</p> <p>3 = Agree</p> <p>4 = Strongly agree</p>

CUSES28	<p>28. I feel confident I could stop to put a condom on myself or my partner even in the heat of passion.</p> <p>0 = Strongly Disagree 1 = Disagree 2 = Undecided 3 = Agree 4 = Strongly agree</p> <p>Drug Use Scale</p> <p>1. The following questions are concerning information about your potential involvement with drugs, excluding alcohol and tobacco, during the past 12 months.</p>
DR1A	<p>1A. Marijuana</p> <p>1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions</p>
DR1B	<p>1B. ADHD medications</p> <p>1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions</p>
DR1C	<p>1C. Salvia</p> <p>1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions</p>

DR1D	6 = 20-39 occasions 7 = 40+ occasions
	1D. MDMA / ecstasy 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
	1E. Cocaine 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
	1F. Methamphetamines 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR1G	1G. Rohypnol 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions

DR1H	<p>1H. Amphetamines</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR1I	<p>1I. Heroin</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR1J	<p>1J. Other psychedelics</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR1K	<p>1K. Anabolic steroids</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR1L	<p>1L. Inhalants</p>

DR2	1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2A	2. On how many occasions in the PAST 30 DAYS have you used the following types of drugs? 2A. Marijuana 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2B	2B. ADHD medications 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2C	2C. Salvia 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2D	

DR2E	<p>2D. MDMA / ecstasy</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR2F	<p>2E. Cocaine</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR2G	<p>2F. Methamphetamines</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p>
DR2H	<p>2G. Rohypnol</p> <p>1 = Never</p> <p>2 = 1-2 occasions</p> <p>3 = 3-5 occasions</p> <p>4 = 6-9 occasions</p> <p>5 = 10-19 occasions</p> <p>6 = 20-39 occasions</p> <p>7 = 40+ occasions</p> <p>2H. Amphetamines</p>

DR2I	1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2J	2I. Heroin 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2K	2J. Other psychedelics 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions
DR2L	2K. Anabolic steroids 1 = Never 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions 2L. Inhalants 1 = Never 2 = 1-2 occasions

ALC1	<p>3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions</p>
ALC2	<p>ALCOHOL USE The next questions concern your use of alcohol. 1. On how many occasions (if any) have you had alcohol to drink—more than just a few sips during the PAST 12 months? 1 = Never had alcohol 2 = 1-2 occasions 3 = 3-5 occasions 4 = 6-9 occasions 5 = 10-19 occasions 6 = 20-39 occasions 7 = 40+ occasions 98 = Refuse to Answer 99 = Don't Know</p>
ALC3	<p>2. IN THE PAST YEAR, on those occasions when you drank alcohol, what is the largest number of drinks you consumed at any one time? ### Drinks 98 = Refuse to Answer</p>
ALC4	<p>3. Thinking specifically now about the PAST FOUR WEEKS (28 days) on how many days, if any, did you have AT LEAST ONE DRINK of beer, wine, or liquor? _____ Days had one or more drinks, between 0-28 98 = Refuse to Answer</p>
ALC5	<p>4. On how many of those days (when you had a drink) did you have MORE THAN ONE drink? _____ Days had more than one drink 98 = Refuse to Answer</p>
ALC6	<p>5. On how many of those days (when you had a drink) did you have THREE or more drinks?</p>

ALC7	<p>_____ Days had 3 or more drinks 98 = Refuse to Answer</p> <p>6. On how many of those days (when you had a drink) did you have SIX or more drinks? _____ Days had 6 or more drinks 98 = Refuse to Answer</p>																		
ALC8	<p>7. What was the MOST number of drinks that you had on any one day in the past four weeks? _____ Most drinks in one day 98 = Refuse to Answer</p>																		
ALC9	<p>8. Of those last 28 days when you did drink an alcoholic beverage, how much did you usually have at any one time? _____ drinks 98 = Refuse to Answer</p>																		
ALC10	<p>9. Over the past TWO weeks, what was the MOST number of drinks that you had on any one occasion? _____ drinks 98 = Refuse to Answer 99 = Did not drink in last two weeks [Skip to ALCEX]</p>																		
ALC11	<p>10. On this occasion, about how long were you drinking alcohol? _____ Hours 98 = Refuse to Answer</p>																		
ALC12	<p>11. For this occasion, record the number of drinks you consume for the following time periods</p> <table border="0"> <tr> <td>11A</td> <td>_____</td> <td>0-1 Hour</td> </tr> <tr> <td>11B</td> <td>_____</td> <td>1 to 2 Hours</td> </tr> <tr> <td>11C</td> <td>_____</td> <td>2 to 3 Hours</td> </tr> <tr> <td>11D</td> <td>_____</td> <td>3 to 4 Hours</td> </tr> <tr> <td>11E</td> <td>_____</td> <td>4 to 5 Hours</td> </tr> <tr> <td>11F</td> <td>_____</td> <td>6+ Hours</td> </tr> </table> <p>98 = Refuse to Answer</p>	11A	_____	0-1 Hour	11B	_____	1 to 2 Hours	11C	_____	2 to 3 Hours	11D	_____	3 to 4 Hours	11E	_____	4 to 5 Hours	11F	_____	6+ Hours
11A	_____	0-1 Hour																	
11B	_____	1 to 2 Hours																	
11C	_____	2 to 3 Hours																	
11D	_____	3 to 4 Hours																	
11E	_____	4 to 5 Hours																	
11F	_____	6+ Hours																	

ALCX	12. Was this drinking occasion representative of most of your drinking occasions in regards to the number of drinks you consumed? 1 = Yes 2 = No 98 = Refuse to Answer	
	13. Please indicate how often DURING THE PAST YEAR you experience the following as a result of drinking	
	In the past year...	Number of occasions
	ALCEX1. I have had a hangover (headache, sick stomach) the morning after I had been drinking.	
	ALCEX2. I have taken foolish risks when I have been drinking.	
	ALCEX3. I've not been able to remember large stretches of time while drinking heavily.	
	ALCEX4. The quality of my work or school work has suffered because of my drinking.	
	ALCEX5. I have had less energy or felt tired because of my drinking.	
	ALCEX6. My drinking has gotten me into sexual situations I later regretted.	
	ALCEX7. I often have ended up drinking on nights when I had planned not to drink.	
	ALCEX8. My physical appearance has been harmed by my drinking.	
	ALCEX9. While drinking, I have said or done embarrassing things.	
	ALCEX10. I have felt very sick to my stomach or thrown up after drinking.	
	ALCEX11. I have not gone to work or missed classes at school because of drinking, a hangover, or illness caused by drinking.	
	ALCEX12. When drinking, I have done impulsive things I regretted later.	
	ALCEX13. I have been overweight because of drinking.	
	ALCEX14. I have woken up in an unexpected place after heavy drinking.	
	ALCEX15. I have spent too much time drinking.	
ALCEX16. I have felt badly about myself because of my drinking.		

	ALCEX17. My drinking has created problems between myself and my boyfriend/girlfriend/spouse, parents, or other near relatives.	
	ALCEX18. I have felt like I needed a drink after I'd gotten up (that is, before breakfast).	
	ALCEX19. I have driven a car when I knew I had too much to drink to drive safely.	
	ALCEX20. I have neglected my obligations to family, work, or school because of drinking.	
	ALCEX21. I have often found it difficult to limit how much I drink.	
	ALCEX22. I have passed out from drinking.	
	ALCEX23. I have become very rude, obnoxious, or insulting after drinking.	
	ALCEX24. I have found that I needed larger amounts of alcohol to feel any effect, or that I could no longer get high or drunk on the amount that used to get me high or drunk.	

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VITA

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